**Amendments to the Claims:**

This listing of claims will replace all prior versions of claims in the present application:

1. (Currently Amended) A method for increasing performance within a multicast network in which a server transfers multicast packets to a master client and at least one passive client, the method comprising the steps of:

(a) determining, by the passive clients during the multicast transfer, which is a slowest passive client based on which passive client drops a highest number of packets; and

(b) making the slowest passive client the master client, thereby adaptively determining which passive client becomes the master client to minimize network traffic when the slowest passive client is slower than the master client and not assigning the slowest passive client as master client when the slowest passive client is faster than the master client,

wherein determining, by the passive clients during the multicast transfer, which is a slowest passive client based on which passive client drops a highest number of packets further includes:

counting, by the passive client, a number of dropped packets during a multicast transfer;

computing a drop ratio when the count of the number of dropped packets reaches a predetermined count threshold; and

if the drop ratio reaches a configurable threshold, sending a Force Master command to the server requesting to become a new master client.

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2.  (Cancelled)


3.  (Currently Amended) The method of claim [[2]] 1 wherein step (b) making

the slowest passive client the master client, thereby adaptively determining which passive

client becomes the master client to minimize network traffic when the slowest passive

client is slower than the master client and not assigning the slowest passive client as

master client when the slowest passive client is faster than the master client further

includes the step of:

       (i)  in response to the server receiving the Force Master command,

sending a Drop Master command from the server to the master client.


4.  (Currently Amended) The method of claim 3 wherein step (b) making

the slowest passive client the master client, thereby adaptively determining which passive

client becomes the master client to minimize network traffic when the slowest passive

client is slower than the master client and not assigning the slowest passive client as

master client when the slowest passive client is faster than the master client further

includes

the step of:

       (ii)  sending from the master client to the server a Drop Master

acknowledgement and causing the master client to enter passive client mode.


5.  (Currently Amended) The method of claim 4 wherein step (b) making the slowest

passive client the master client, thereby adaptively determining which passive client

becomes the master client to minimize network traffic when the slowest passive client is slower than the master client and not assigning the slowest passive client as master client when the slowest passive client is faster than the master client further includes ~~the step of~~:

      ~~(iii)~~ restarting the drop packet counter in the passive client after the Drop Master command has been sent from the server.


6. (Currently Amended) The method of claim 5 wherein ~~step (b)~~ making the slowest passive client the master client, thereby adaptively determining which passive client becomes the master client to minimize network traffic when the slowest passive client is slower than the master client and not assigning the slowest passive client as master client when the slowest passive client is faster than the master client further includes ~~the step of~~:

      ~~(iv)~~ sending from the server a Force Master acknowledge to the passive client that issued the Force Master command.


7. (Currently Amended) A method for increasing performance <u>within</u> a multicast network in which a server <u>transfers</u> multicast packets to a master client and at least one passive client, comprising ~~the steps of~~:

    ~~(a)~~ counting, by the passive client, a number of packets dropped during a multicast transfer;

    ~~(b)~~ computing a drop ratio when the count of the number of packets dropped reaches a predetermined count threshold; and

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(e) if the drop ratio reaches a configurable threshold, sending a Force Master command to the server requesting to become a new master client, thereby adaptively determining which <u>passive</u> client becomes the master client in real-time <u>unless the passive client is faster than the current master client</u>.

8.   (Currently Amended) The method of claim 7 further including ~~the step of~~:

(d)      in response to the server receiving the Force Master command, sending a Drop Master command from the server to the master client.

9.   (Currently Amended) The method of claim 8 further including ~~the step of~~:

(e)      sending from the master client to the server a Drop Master acknowledgement and causing the master client to enter passive client mode.

10. (Currently Amended) The method of claim 9 further including ~~the step of~~:

(f)      restarting the drop ratio counter in the passive client after the Drop Master command has been sent from the server.

11. (Currently Amended) The method of claim 10 further including ~~the step of~~:

(g)      sending from the server a Force Master acknowledge to the passive client that issued the Force Master command.

12. (Currently Amended) The method of claim 11 further including ~~the step of~~:

(h)      after the passive client receives the Force Master acknowledge, receiving

the packets from the server as the new master client.

13. (Currently Amended) A multicast network system, comprising:

a server for multicasting packets over the network;

a current master client that controls the rate of multicast transfer of the packets

based upon a processing speed of the current master client; and

at least one passive client executing an algorithm for:

(a) counting a number of packets dropped during a multicast transfer;

(b) computing a drop ratio when the count of the number of packets dropped

reaches a predetermined count threshold; and

(c) if the drop ratio reaches a configurable threshold, sending a Force Master

command to the server requesting to become a new master client, thereby adaptively

determining which passive client becomes the master client in real-time unless the

passive client is faster than the current master client.

14. (Original) The system of claim 13 wherein in response to the server receiving the

Force Master command, sending a Drop Master command from the server to the master

client.

15. (Original) The system of claim 14 wherein from the master client sends a Drop

Master acknowledgement to the server and enters passive client mode.

16. (Original) The system of claim 15 wherein the passive client restarts the drop

ratio counter after the Drop Master command has been sent from the server.

17. (Original) The system of claim 16 wherein the server sends a Force Master
acknowledge to the passive client that issued the Force Master command.

18. (Original) The system of claim 17 wherein after the passive client receives the
Force Master acknowledge, the passive client receives the packets from the server as the
new master client.

19. (Currently Amended) A computer-readable medium containing program
instructions for increasing performance within a multicast network in which a server
transfers multicast packets to a master client and at least one passive client, the program
instructions for:

    (a) determining, by the passive clients during the multicast transfer, which is a
slowest passive client based on which passive client drops a highest number of packets;
and

    (b) making the slowest passive client the master client, thereby adaptively
determining which passive client becomes the master client to minimize network traffic
when the slowest passive client is slower than the master client and not assigning the
slowest passive client as master client when the slowest passive client is faster than the
master client; and

    wherein determining, by the passive clients during the multicast transfer, which is
a slowest passive client based on which passive client drops a highest number of packets

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and wherein the instruction further includes the instruction of:

counting, by the passive client, a number of packets dropped during a

multicast transfer;

computing a drop ratio when the count of the number of packets dropped

reaches a predetermined count threshold; and

if the drop ratio reaches a configurable threshold, sending a Force Master

command to the server requesting to become a new master client.


20. (Cancelled)


21. (Currently Amended) The computer-readable medium of claim [[20]] 19 wherein

instruction (b) making the slowest passive client the master client, thereby adaptively

determining which passive client becomes the master client to minimize network traffic

further includes the instruction of:

(i) in response to the server receiving the Force Master command,

sending a Drop Master command from the server to the master client.


22.      (Currently Amended) The computer-readable medium of claim 21 wherein

instruction (b) making the slowest passive client the master client, thereby adaptively

determining which passive client becomes the master client to minimize network traffic

further includes the instruction of:

(ii)      sending from the master client to the server a Drop Master

acknowledgement and causing the master client to enter passive client mode.


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23.     (Currently Amended) The computer-readable medium of claim 22 wherein ~~instruction (b)~~ making the slowest passive client the master client, thereby adaptively determining which passive client becomes the master client to minimize network traffic further includes the instruction of:

> ~~(iii)~~     restarting the drop ratio counter in the passive client after the Drop Master command has been sent from the server.

24.     (Currently Amended) The computer-readable medium of claim 23 wherein ~~instruction (b)~~ making the slowest passive client the master client, thereby adaptively determining which passive client becomes the master client to minimize network traffic further includes the instruction of:

> ~~(iv)~~     sending from the server a Force Master acknowledge to the passive client that issued the Force Master command.